

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

TON TON TION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/669,426	09/25/2000	Takeshi Igarashi	205701	4028	
7590 03/14/2002 Leydig Voit & Mayer Ltd			EXAMINER		
Suite 4900 Tw 180 North Stet	o Prudential Plaza		NGUYEN, CAM N ART UNIT PAPER NUMBE		
Chicago, IL 6					
			1754		
			DATE MAILED: 03/14/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

	•					
		Application No. 09/669,426	Applicant(s)	Igarashi	et al.	
i.	Office Action Summary	Examiner Cam Nguye	en	Art Unit 1754		
	The MAILING DATE of this communication appear	rs on the cover sheet w	ith the correspon	dence add	lress	
A SHO	or Reply DRTENED STATUTORY PERIOD FOR REPLY IS SE MAILING DATE OF THIS COMMUNICATION.					
- Exten aft - If the be - If NO co - Failul	MAILING DATE OF THIS COMMONICATION. asions of time may be available under the provisions of 37 ter SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) data considered timely. The period for reply is specified above, the maximum statutor immunication. The to reply within the set or extended period for reply will, reply received by the Office later than three months after that the period patent term adjustment. See 37 CFR 1.704(b).	ys, a reply within the starty period will apply and w	utory minimum of	thirty (30) 10NTHS fro	days will om the mailing date of thi NED (35 U.S.C. § 133).	
Status 1) 💢	Responsive to communication(s) filed on Sep 25,	, 2000			·	
2a) 🗌	I III delicit is I iii i i i i i i i i i i i i i i i	action is non-final.				
3) 🗆	Since this application is in condition for allowanc closed in accordance with the practice under Ex	e except for formal m parte Quayle, 1935 (atters, prosecu C.D. 11; 453 O.	tion as to G. 213.	the merits is	
Dispos	ition of Claims		ielara n	ending in	the application.	
4) 💢	Claim(s) <u>1-12</u>		is/ale p	ending in	- from consideration	
	4a) Of the above, claim(s) 11 and 12		is/are	withdrawi	n from consideration.	
5) 🗆			is.	are allow	ed.	
6) 💢	Claim(s) 1-10		is	/are reject	ted.	
7) 🗆	Claim(s)		is	/are objec	ted to.	
8) 🗆		are su	oject to restricti	on and/or	election requirement	
Applic	ation Papers					
9) 🗆	The specification is objected to by the Examiner	r .				
10)[The drawing(s) filed onis,	/are objected to by the	Examiner.	. —	- n - 1 - 1 - 1	
11)	the description filed on	is: a)	_ approved b	ı)∟ disapı	proved.	
12)	to the Ev					
13) 💢	by under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreig $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	gn priority under 35 U	S.C. § 119(a)-(d).	,	
a)	1. X Certified copies of the priority documents	have been received.				
	2 Certified copies of the priority documents	have been received in	Application No	o	·	
	3. Copies of the certified copies of the priori	ty documents have be Bureau (PCT Rule 17.	een received in : 2(a)).	this Natio	nal Stage	
14)[See the attached detailed Office action for a list of Acknowledgement is made of a claim for dome	or the certified copies estic priority under 35	U.S.C. § 119(e	e).		
	hment(s)	18) Interview Summ	nary (PTO-413) Paper I	No(s)		
	Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Inform				
	Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20) Other:				

Art Unit: 1754

DETAILED ACTION

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10, drawn to a method for producing hydrocyanic acid catalyst and catalyst thereof, classified in class 502, subclass 325+.
 - II. Claims 11-12, drawn to a method for making hydrocyanic acid using a catalyst, classified in class 423, subclass 364+.

The inventions are distinct, each from the other because:

- 2. Inventions I and II are related as process of making and process of using the product. The use as claimed cannot be practiced with a materially different product. Since the product is not allowable, restriction is proper between said method of making and method of using. The product claim will be examined along with the elected invention (MPEP § 806.05(I)).
- 3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, and have acquired a separate status in the art as shown by their different classification, and because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with *Mr. Gordon R. Coons* on *January 30, 2002* a provisional election was made *with traverse* to prosecute the invention of Group I, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims

Art Unit: 1754

11-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the 5. inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Claim Rejections - 35 USC § 102(e)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the 6. basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- Claims 1-3, 5, & 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohmi, 7. "hereinafter Ohmi '424", (U.S Pat. 5,817,424).

Ohmi '424 discloses a method of forming a passive oxide film on the surface of the steel pipe (or iron pipe) including the steps of subjecting the interior of a stainless steel pipe to a heat treatment at a temperature of 500°C and for a period of 1 hour in an atmosphere of a gas containing hydrogen and oxygen, with a hydrogen concentration of 10% and oxygen

Art Unit: 1754

concentration of 100 ppb, forming a passive oxide film on the steel pipe (see col. 8, ln 11-20). The passive oxide film on the steel pipe obtained is further subjected to another heat treatment at a temperature of 500°C with a gas containing hydrogen and oxygen, with hydrogen concentration of 10% and oxygen concentration of 1 ppm, supplied to the interior of the pipe for a period of 1

hour, and the thermal oxidation treatment was conducted (see col. 8, ln 21-29).

Recitation of "a method of producing a hydrocyanic acid synthesis catalyst" in the preamble is noted. It is considered that the passive oxide film formed on the steel pipe surface as disclosed by the reference is the catalyst that applicants claiming, because both applicants and the reference teach to conduct the process in the same manner.

With respect to the claimed hydrogen gas concentration (in claim 5), the claimed hydrogen gas concentration is met by the teaching of the reference since the disclosed range falls within the claimed range (see Ohmi '424 at col. 8, ln 11-20).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1754

9. Claims 4 & 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmi, "hereinafter Ohmi '424", (U.S Pat. 5,817,424), as applied to claims 1-3, 5, & 10 above, and in further view of Ohmi, "hereinafter Ohmi '368", (U.S Pat. 5,840,368).

Ohmi '424 discloses a method of forming a passive oxide film on the surface of the steel pipe (or iron pipe) as described above, except for the following differences.

With respect to the claimed oxygen concentration, Ohmi '424 does not specifically disclose the claimed oxygen concentration. It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have predetermined the optimum amount of oxygen for such process in order to obtain the desired oxide film thickness, since it involves only within routine experimentation of one having the ordinary skill in the art.

The claimed temperature and time are met by the teachings of the reference since the disclosed temperature and time fall within the claimed ranges (see Ohmi '424 at col. 8, ln 11-20).

With respect to the pressure limitation, Ohmi '424 does not specifically disclose the pressure as being claimed. However, Ohmi '368 fairly suggests conducting a thermal oxidation process at a pressure of 1 kg/cm² or more (which is equivalent to 98 kpa or more) to obtain an oxide film (see Ohmi '368 at col. 2, ln 33-44). Note, a pressure of 98 kpa or more as disclosed falls within the claimed pressure range. It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to conduct the process of Ohmi '424 at the pressure taught by Ohmi '368 since both Ohmi '424 and Ohmi '368 teach the same thermal oxidation process for forming an oxide film.

Art Unit: 1754

With respect to the claimed space velocity, Ohmi '424 is silent on the space velocity. It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have predetermined the space velocity of the oxidative gas and reductive gas for such process, since it involves only routine experimentation of one having the ordinary skill in the art.

Citations

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Azuma (U.S Pat. 6,231,690 B1), Byrd et al. (U.S Pat. 3,936,543), Hidaka et al. (U.S Pat. 6,210,806 B1), Ohmi (U.S Pat. 5,580,398), Ohmi et al. (U.S Pat. 5,407,492), Ohmi et al. (U.S Pat. 5,295,668), Ohmi et al. (U.S Pat. 5,226,968), Gibson et al. (U.S Pat. 4,123,292), Sendzimir (U.S Pat. 2,110,893), Mahoney (U.S Pat. 3,615,353), Shinno (U.S Pat. 4,327,132), & European Pat. (EP 0 648 864 B1) are cited for related art.

Conclusion

11. Claims 1-12 are pending. Claims 1-10 are rejected. Claims 11-12 are withdrawn due to nonelected (distinct) invention. No claims are allowed.

Art Unit: 1754

Any inquiry concerning this communication or earlier communications from the examiner 12. should be directed to Examiner Cam Nguyen, whose telephone number is (703) 305-3923. The examiner can normally be reached on M-F from 8:30 am. to 6:00 pm, with alternative Monday off.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (before finals) and (703) 872-9311 (after-final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Nguyen/cnn CNN

March 7, 2002

TECHNOLOGY CENTER 1700

Page 7